

#### December 8, 2015

# Limited Environmental Review and Finding of No Significant Impact Akron Mud Run District I-I Rehabilitation, CS390095-0107 Akron Mud Run District I-I Repairs, CS390095-0108

The attached Limited Environmental Review (LER) is for a wastewater treatment project in your area which the Ohio Environmental Protection Agency intends to finance through its Water Pollution Control Loan Fund (WPCLF) below-market interest rate revolving loan program. The LER describes the project, its costs, and expected environmental benefits. Making available this LER fulfills Ohio EPA's environmental review and public notice requirements for this loan program.

Ohio EPA analyzes environmental effects of proposed projects as part of its WPCLF program review and approval process. We have concluded that the proposed project should not result in significant adverse environmental impacts. This project's relatively narrow scope and lack of environmental impacts qualifies it for the LER rather than a more comprehensive Environmental Assessment. More information can be obtained by calling or writing the person named at the end of the document.

Loan award will proceed without further environmental review or public comment unless new information shows that environmental conditions of the proposed project have changed significantly.

Sincerely

Jerry Rouch, Assistant Chief

Division of Environmental and Financial Assistance

Office of Financial Assistance

JR/DH

attachment

#### LIMITED ENVIRONMENTAL REVIEW

## A. Project Identification

Project Name: Akron Mud Run District I-I Rehabilitation, CS390095-0107

Akron Mud Run District I-I Repairs, CS390095-0108

Address: Rob Solomon

Akron Engineering Bureau 166 South High Street Akron, OH 44308

#### B. History and Existing Conditions

Akron's Long-Term Control Plan (LTCP) and 2009 federal Consent Decree, which guide the city's efforts to eliminate sewage overflows to area streams, require evaluation of the aged Mud Run District sewers to direct improvements in the system. The Mud Run District sewer system serves the Kenmore and Rolling Acres neighborhoods of southwest Akron and has a lengthy history of sewage backups into basements. Sewage flows to the regional Mud Run Pump Station, which is currently being modernized and expanded based on an evaluation of the entire Mud Run District sewers and pump station.

Sanitary sewers and wastewater treatment plants function optimally within a range of flows of sanitary sewage only. Additional clear water flows, whether from downspouts, leaky manholes, or other connections to sewers (inflow) or from ground water entering cracks in the sewer (infiltration), can exceed the capacity of the sewers and WWTP and cause operational problems and/or basement backups or direct discharge of untreated wastewater to surface water.

## C. Project Description

This project involves rehabilitation of existing sanitary sewers with identified deficiencies in the Mud Run District in western and southwestern Akron (Figure 1). Construction involves the repair or replacement of 7,750 linear feet of 8" to 24" diameter sanitary sewers in the same trench where existing pipes are collapsed or structurally unsound, the replacement of 17 manholes, and the installation of 3 new manholes. Rehabilitation involves installation of cured in place pipe (CIPP) in approximately 24,500 linear feet of 8" to 24" diameter sanitary sewers and 134 manholes, and replacement of 124 vented manhole lids with solid lids.

The CIPP process involves the insertion into the sewer of a fabric tube impregnated with a heat-setting resin. The lining is typically inserted via existing manholes, installed using water pressure, and cured by circulating hot water through the pipe; after the liner is intact, a robot cutter opens the existing lateral connection holes to allow wastewater

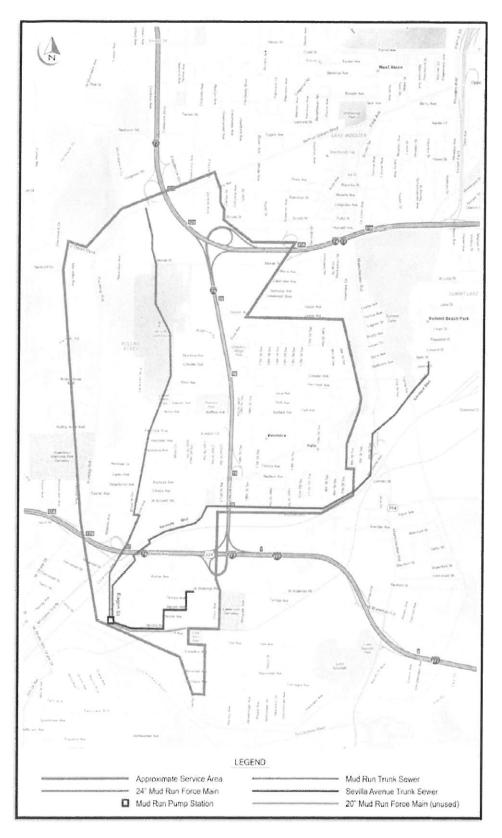


Figure 1 – General Project Location

to re-enter the sewer.

This seamless pipe prevents infiltration and exfiltration, restores structural integrity, and eliminates joints that can weaken and allow root intrusion. CIPP increases flow capacity because the new lining is much smoother than old clay, brick, or concrete pipe. CIPP rehabilitation is a "trenchless technology" because the work is typically completed through existing manholes with minimal or no excavation required and minimal traffic disruption.

This project will help reduce overflows from the Mud Run Pump Station by minimizing infiltration entering the existing sanitary sewers tributary to the Mud Run Trunk Sewer, which was recently rehabilitated with CIPP, and reduce flows to the sewers downstream of the pump station and ultimately to Akron's Water Pollution Control Station.

## D. Estimated Project Costs

Akron will borrow approximately \$10,134,000 from the Ohio Water Pollution Control Loan Fund (WPCLF) in two loans at the standard interest rate (2.14%; the rate is set monthly and may change for a later loan award). During the 20-year loan period, Akron will save approximately \$1,526,900 by using WPCLF dollars at this rate, compared to the market rate of 3.39%.

#### E. Project Schedule

Assuming WPCLF loan award in December 2015, construction will begin in early 2016 and be completed by September 2016.

#### F. Public Notification

Akron in May 2014 included this project's information in its annual notification of projects and request for public comment. No comments were received.

Ohio EPA will make a copy of this document available to the public on its web page <a href="http://epa.ohio.gov/defa/ofa.aspx#169638769-wpclf-documents-for-review-and-comment">http://epa.ohio.gov/defa/ofa.aspx#169638769-wpclf-documents-for-review-and-comment</a> and will provide it to interested parties.

Information supporting this Limited Environmental Review (LER) is available from the project contact named below.

#### G. Conclusion

The proposed sanitary sewer repair and rehabilitation is minor upgrading, minor rehabilitation of existing facilities, and infiltration and inflow correction that qualifies for a LER and meets the following additional criteria for a LER:

It has no significant environmental effect; it has no effect on high value environmental resources; and it does not require extensive specific impact mitigation – All work will be in or over existing sanitary sewer easements beneath pavement or in off-pavement areas previously disturbed by sewer construction. CIPP is installed through existing manholes with very limited or no excavation. Limited tree removal will occur during cold weather (October 1 – March 31) when endangered bat species would be absent. Commonly employed construction best management practices will minimize noise, dust, traffic disruption, and storm water runoff. Access to private property will be by permission of each owner with advance notice of 48 hours, and no work will occur on the city-owned Mud Run Golf Course or Leeser Avenue Ball Fields between April 1 and October 15, the period of highest use of those public recreation facilities.

It is cost effective and not controversial – Repair and rehabilitation of sanitary sewers and wastewater treatment facilities, when replacement is unnecessary, typically costs less than constructing new facilities and extends the useful life the of the system at lower cost than new construction. The typical residential annual sewer bill in Akron and other served communities is \$1,150, which is approximately 2.64% of local median household income (adjusted MHI; \$43,563). This cost is higher than the Ohio average residential sewer bill of \$606, which is 1.3% of state MHI (\$48,081). By using the WPCLF low-interest financing for this project, Akron has minimized the cost and the economic impact on residents and the local economy of this public health and water quality improvement project. This project requires no additional rate increase and Ohio EPA is unaware of controversy about or opposition to the project.

It does not create a new, or relocate an existing, discharge to surface or ground waters; it will not result in substantial increases in the volume of discharge or the loading of pollutants from an existing source or from new facilities to receiving waters; it will not provide capacity to serve a population substantially greater than the existing population - These projects will rehabilitate and improve the existing sewers and maintain their capacity for transporting sewage while minimizing extraneous water entry that compromises capacity, and will have no other effect on the Mud Run Trunk Sewer, tributary sewers, downstream sewer capacity or sewage treatment capacity.

The planning activities for the project have identified no potentially significant adverse impacts. The project is expected to have no significant short-term or long-term adverse impacts on the quality of the human environment or on sensitive resources (surface waters, coastal zones, floodplains, wetlands, state-designated scenic or recreational rivers, prime or unique agricultural lands, aquifer recharge zones, archaeologically or historically significant sites, threatened or endangered species, or state and federal wildlife areas).

## I. For more information, please contact:

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